Customer No. 035884 **Attorney Docket No. 2101-3053**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Young Dae LEE et al. Serial No: 10/666,647 Filed: September 19, 2003 For: PROVIDING MULTICAST SERVICES IN A POINT-TO-MULTIPOINT MANNER FOR A RADIO COMMUNICATION SYSTEM	Art Unit: 2152 Examiner: Hoang, Hieu T. Conf. Number: 8504

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Final Office Action dated April 14, 2008 and the Advisory Action dated July 21, 2008, the three-month period for response having been extended to September 14, 2008, by virtue of the concurrent submission of a petition for a two-month time extension and payment of fees, Applicants request review of the final rejection in the above-identified application.

Review of the application is requested for the reasons set forth below. No amendments are being filed with this request.

A Notice of Appeal is concurrently submitted herewith.

REMARKS

Claims 1-6, 8-10, 12, 13, 16, 18-25, 28-30, 32, 34, 35, 39, 41, 42, 51-56, 71, 72, 74 and 75 are all the claims pending in the application, claims 7, 11, 14, 15, 17, 26, 27, 29, 31, 33, 36-38, 40, 43-50, 57-70, 73 and 76-80 having been previously canceled. Claims 1, 18, 28, 35, 42, 51 and 71 are independent claims. Claims 1-6, 8-10, 12, 13, 16, 18-25, 28, 30, 32, 34, 35, 39, 41, 42, 51-56, 71, 72, 74 and 75 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Leung (U.S. Patent Application Publication No. 2003/0087653) in view of Applicants' Admitted Prior Art (AAPA). Applicants submit that there are a number of clear errors in the Examiner's rejections. These issues, along with other matters, will be discussed in more detail below.

1. Leung reference.

Claims 1-6, 8-10, 12, 13, 16, 18-25, 28, 30, 32, 34, 35, 39, 41, 42, 51-56, 71, 72, 74 and 75 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Leung in view of AAPA. The Examiner recently clarified, for which applicant is appreciative, that it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Leung with the teachings of AAPA to substitute a ROHC with a PDCP and a PDSN with a CRNC to apply Leung's teachings to the UMTS mobile environment of AAPA. Advisory Action of July 21, 2008, paragraph 7.

However, there is substantial evidence that the Examiner's conclusions are misplaced. Independent claims 1, 18, 28, 35, 42, 51 and 71 each recite "the Internet protocol header compression is performed in a packet data convergence protocol (PDCP) entity located within a serving radio network controller (SRNC) in case of a point-to-point manner and within a controlling radio network controller (CRNC) in case of a point-to-multipoint manner" and "the point-to-multipoint service is a multimedia broadcast/multicast service (MBMS) and one PDCP entity exists in the CRNC for each MBMS service in case of the point-to-multipoint manner" or similar limitations.

According to the Examiner, Leung discloses a single header compression module in a packet data service node PDSN for providing multicast/broadcast service. Advisory Action of July 21, 2008, paragraph 6. Thus, the Examiner asserts that Leung suggests using a single header compression module for a CRNC for multicast/broadcasting or point-to-multipoint service. *Id.* at paragraph 6.

Moreover, the Examiner previously cited paragraph 0068, lines 5-8 of Leung as teaching that "internet protocol header compression is performed in a robust header compression ROHC within a packet data service node PDSN in case of the point-to-multipoint manner" and "one ROHC entity

exists in the PDSN for each MBMS service in case of the point-to-multipoint manner." Final Office Action of April 14, 2008, paragraph 7.

As respectfully submitted in the Response filed on July 14, 2008, Leung merely discloses a very broad and general conventional art robust header compression scheme where the PDSN provides header compression information to an MS and the header compression information is compressed or performed by the ROHC. Furthermore, Leung fails to explicitly disclose a PDCP entity located within a SRNC in case of a point-to-point manner and within a CRNC in case of a point-to-multipoint manner, and the point-to-multipoint service is a MBMS service and only one PDCP entity exists in CRNC for each MBMS service in case of the point-to-multipoint manner. Additionally, the conventional ROHC scheme disclosed in Leung is not related to a type of service, such as a "point-to-point service" or "point-to-multipoint service."

2. AAPA reference.

According to the Examiner, AAPA explicitly discloses that a header compression module PDCP exists in each SRNC for unicast or point-to-point transmission and a single CRNC controlling multiple SRNCs. Advisory Action of July 21, 2008, paragraph 6.

As respectfully noted in the Response filed on July 14, 2008, independent claims 1, 18, 28, 35, 42, 51 and 71 specifically recite "a packet data convergence protocol (PDCP) entity" that is located "within a serving radio network controller (SRNC) in case of a point-to-point manner" and "within a controlling radio network controller (CRNC) in case of a point-to-multipoint manner." Although AAPA teaches a PDCP entity located within each SRNC and one CRNC controlling multiple SRNCs, AAPA does not teach or suggest a PDCP entity located within the SRNC and CRNC, as recited in claims 1, 18, 28, 35, 42, 51 and 71.

Furthermore, the invention defined by claims 1, 18, 28, 35, 42, 51 and 71 reduces the total number of PDCP entities necessary for performing header compression/decompression and transmission/reception of compressed headers by locating the PDCP entity within the CRNC in case of the point-to-multipoint manner. This is in contrast to AAPA wherein the total number of PDCP entities equals the total number of mobile terminals.

3. Leung reference not related to UMTS.

As previously submitted in the previous Response filed on March 17, 2008, and reiterated in the Response filed on July 14, 2008, Leung relates to an intermittent broadcast service that conserves

bandwidth and other transmission resources of a wireless communication system. A trigger recognized at a transmission node initiates a broadcast transmission, wherein a transmission path is set up. A termination trigger indicates that the transmission node is not serving a user desiring the broadcast transmission, and in response the transmission path is shut down. Leung attempts to solve the problem of a conventional system, in which a PSDN performs a duplication procedure required in transmitting information to multiple users, which results in problems of resource allocation and loss of available bandwidth (see paragraph [0034] of Leung). Leung's invention includes having a BS or PCF perform the duplication procedure, to thus free up the PDSN or central packet router (see paragraph [0035] of Leung).

However, as previously submitted in the previous Response filed on March 17, 2008, and reiterated in the Response filed on July 14, 2008, there is no teaching or suggestion in Leung about UMTS networks having a UTRAN with multiple RNCs.

4. Conclusion with regard to Leung and AAPA.

In view of the foregoing, it is respectfully submitted that the combination of Leung and the AAPA is improper and it respectfully requested that the rejections be withdrawn. Notwithstanding that the combination of Leung and the AAPA is improper, it is further respectfully submitted that the combination of Leung and the AAPA fail to teach or suggest features recited in independent claims 1, 18, 28, 35, 42, 51 and 71, and therefore the claims are believed to be patentable. In addition, dependent claims 2-6, 8-10, 12, 13, 16, 19-25, 30, 32, 34, 39, 41, 52-56, 72, 74 and 75 are also believed to be patentable at least by virtue of their respective dependence on the patentable independent claims.

In light of the above remarks, Applicants submit that the present application is in condition for allowance and requests a Notice of Allowance. The undersigned attorney is available at (213) 623-2221 to discuss any matter concerning this application.

Respectfully submitted,
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Date: September 15, 2008
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